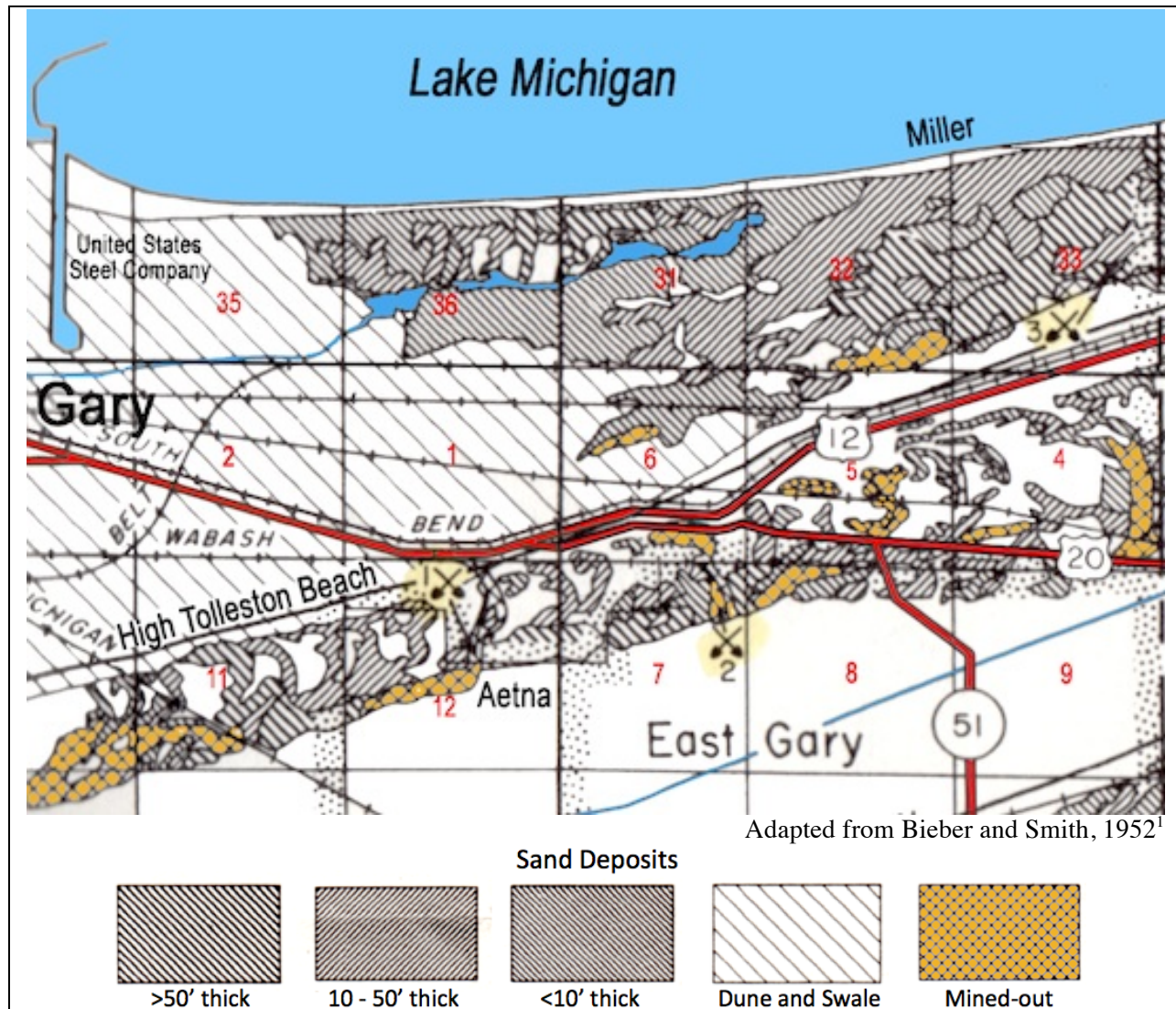


Chapter 5

Sand Mining in Northeast Lake County



In 1950 when this map was prepared by Geologists C. L. Bieber and Ned Smith, there were three large-scale active sand mining operations still occurring in Lake County. They were:

1. West Aetna: Construction Aggregates Corporation (in Section 12)
2. East Aetna: J. N. Bos Sand Company (in Section 7)
3. Southeast Miller: Aetna Superior Sand Company (in Section 33)

Large-scale sand mining in Lake County began at some time between 1873 and 1900. The tan areas on the map show places that were by 1950 “mined out,” meaning that mining had occurred there in the past and the area was thought to have no more commercially available sand. Note

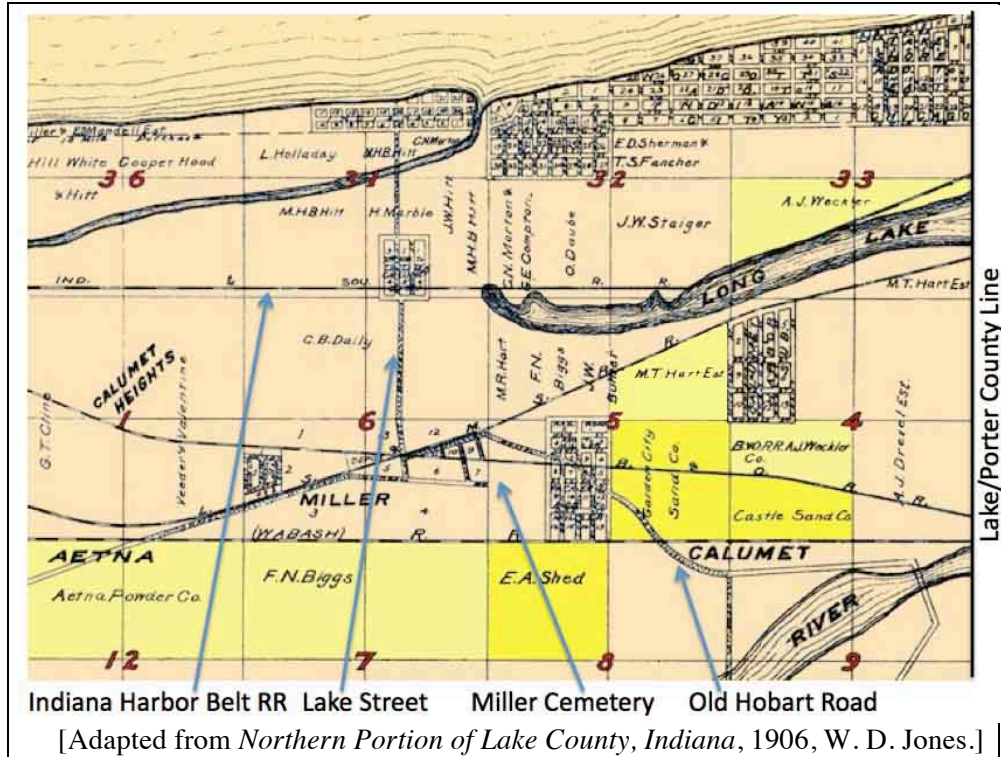
¹ Upper left sections on the map are in Township 37 North, Range 8 West; Upper right: Township 37 North, Range 7 West; Lower left Township 36 North, Range 8 West; Lower right: Township 36 North, Range 7 West

that Bieber and Smith show Route 51 intersecting U.S. 20 at the Old Hobart Road. Color was added by this author.

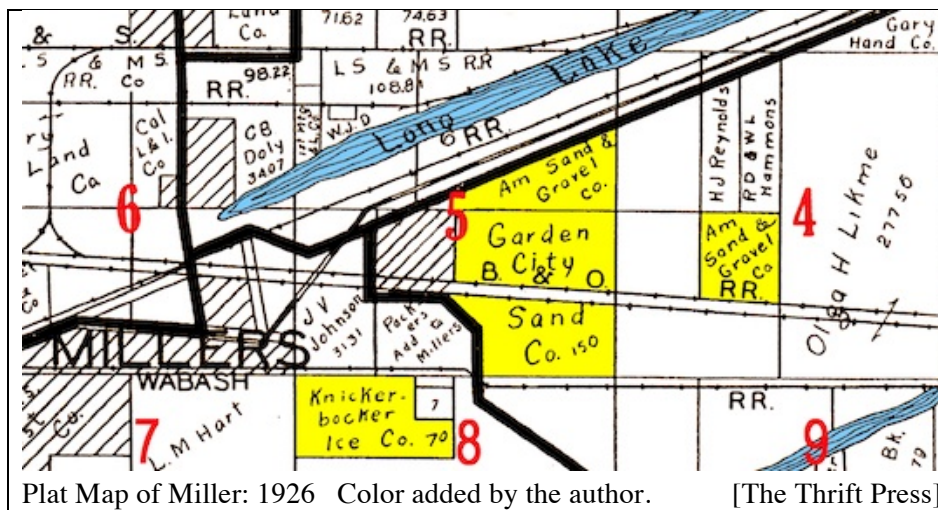
Miller area:

“Shipping sand from the large banks nearby is a profitable industry.”
[Timothy Ball, 1900, p. 411]

From the 1850s until the 1870s Miller was a tiny hamlet along the Michigan Southern Railroad. It grew when the Baltimore and Ohio (B&O) Railroad crossed the Michigan Southern line and a depot was built serving both lines.



Miller area in 1906. Indiana City (at the mouth of the Calumet River) and nearly all the other platted areas were never developed. Sand mining company lands are in yellow. Future sand mining land is in light yellow. E. A. Shedd became Knickerbocker Ice Company, which, in spite of its name, was one of the largest sand mining companies in the Chicago/Northwest Indiana area.



By 1926 American Sand and Gravel Company had purchased part of the B&O land in Section 4 and the land south of the Michigan Southern tracks in Section 5 earlier belonging to Aaron and Martha Hart.

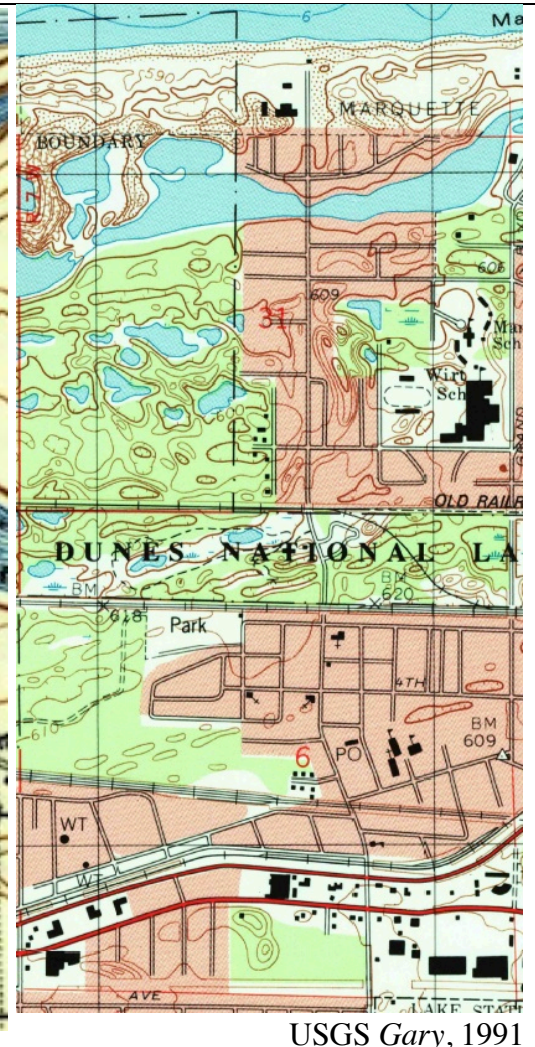
Note that all the sand mining properties were next to rail lines.

Lake Street area (East ½ Section 31 and 6)

The Lake Street area has witnessed minimal sand mining. Lake Street, the oldest street in Miller, has always been its commercial center, if no longer its geographic center. Although there was no extensive sand mining of the size that occurred further east, nevertheless a significant amount of sand was removed from the Lake Street area before it was developed. Even though the 1900 map does not show small surface features, a number of alterations of the ground can be seen by comparing these two maps. Miller Avenue parallels the original Michigan Southern tracks.

Section 31 →

Section 6 →



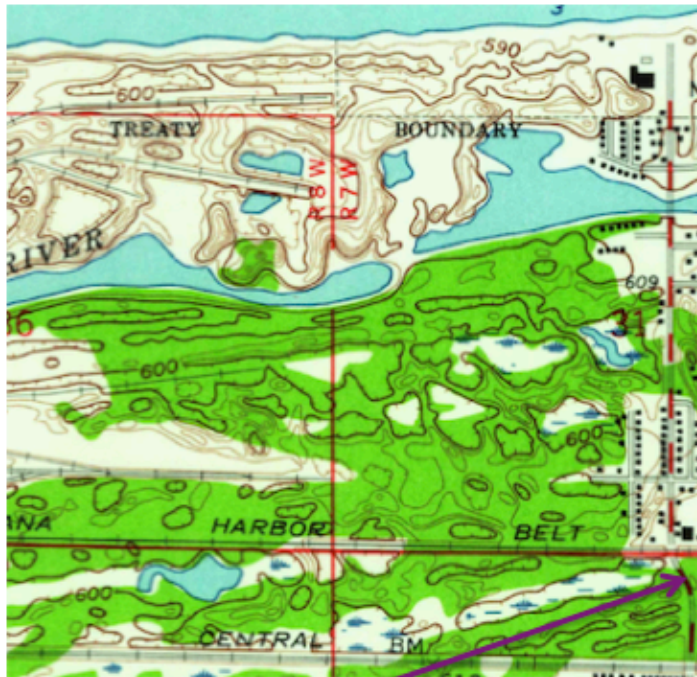
Besides the fact that the 1991 map shows more detail, compared to the 1900 map, it shows:

- The dunes along the lakeshore have moved and the river (lagoon) has been altered.
- The 50-foot dune in the center of Section 31 is lower and is replaced by several depressions and ponds. (Green Heron Pond is the one furthest northeast.)

² The earliest topographic map of the Duneland area is the Tolleston map published in 1900. It is a “15-minute map” which means it encompasses an area of both 15° latitude and longitude. All other topographic maps in this report except the Porter maps of 1935 and 1940 are “7.5 minute maps;” they encompass one-fourth the area and are thus roughly four times as detailed.

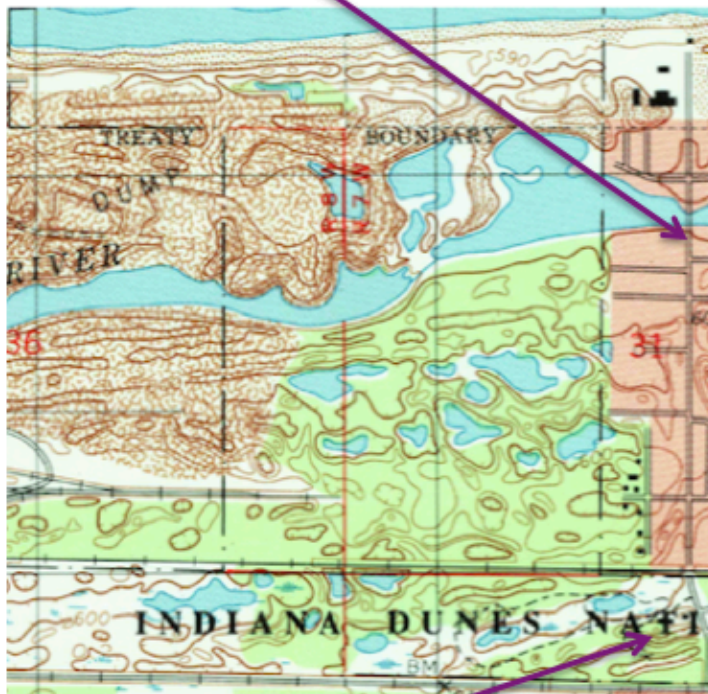
- The 30-foot dune next to Lake Street in Section 6 is gone.

Miller Woods (E½ Section 36 and W½ Section 31)



Lake Street

USGS Gary 1959

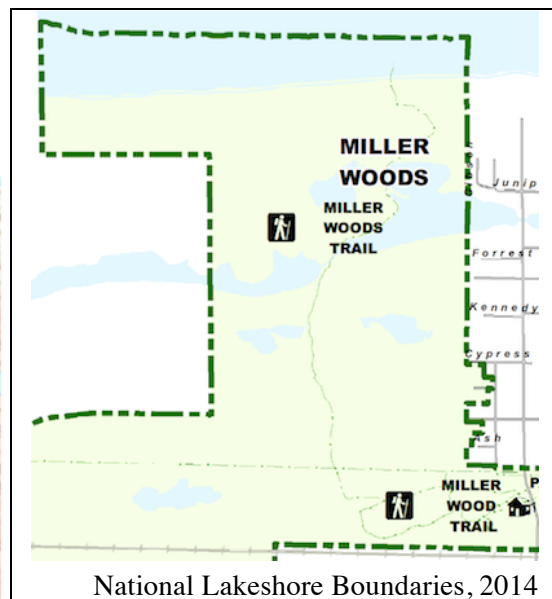


Douglas Center

USGS Gary 1991

The northern part of Miller Woods, (north of the old Indiana Harbor Belt rail line) is land that was owned by U.S. Steel Company. It contains a short rail line, which by necessity required smoothing the land to accommodate the rails.

The southern section, the land between the two parallel rail lines, was owned by the New York Central Railroad. Both sections show the uneven, somewhat linear dune and swale topography that was typical of the original western Miller landscape. It has had very little other alteration.



National Lakeshore Boundaries, 2014

Most of Miller Woods was added to the National Lakeshore in 1976. (An expansion of the woods westward was added four years later.) Not included was most of the East half of Section 36 which did experience sand mining by U. S. Steel followed by the dumping of slag.

The Paul Douglas Center for Environmental Education, at the woods entrance, was built in 1985-86 just west of Lake Street (at the southeast corner of the lower maps)

Marquette Park area (Section 32)

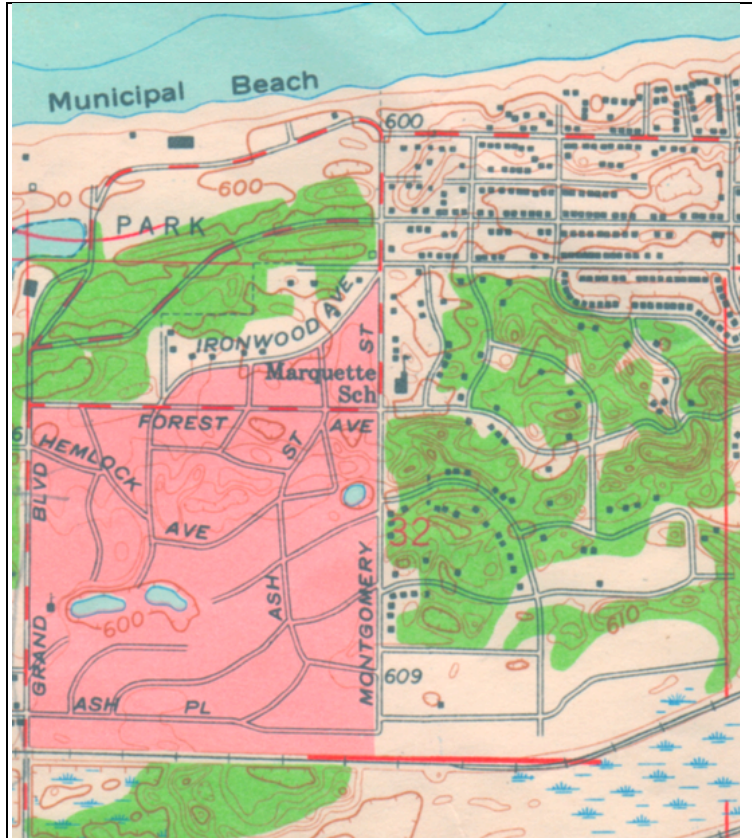
Section 32 is east of Grand Boulevard, west of Randolph Street, and immediately north of the now abandoned Indiana Harbor Belt railroad line and the National Lakeshore property south of the tracks.

Marquette Park, originally called Lake Front Park, occupies the northern-most area of the west half of Section 32. The land was purchased by United States Steel Company about 1918 and donated to the city of Gary to be used as a park. In the early 1920s the land was stripped of its underbrush and the undulating dune and swale topography was smoothed out. Most of the rest of the section is residential.

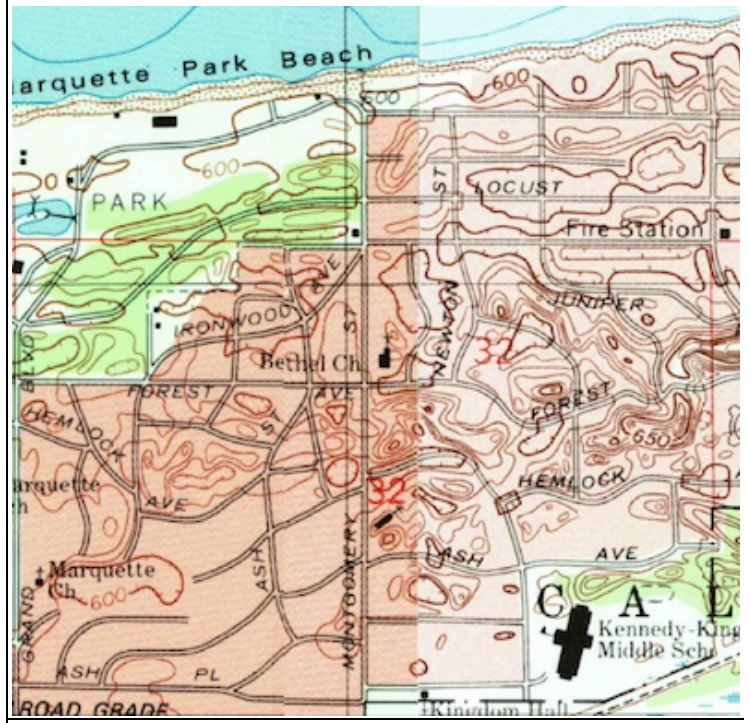
The flat southern part of the section, near Kennedy-King school and immediately north of National Lakeshore property, was mined before 1952 at which time it was deemed “mined out” by geologists C. L. Bieber and Ned M. Smith. (See map on the first page of this chapter.)



National Lakeshore boundary, 2014



USGS Gary and Vicinity 1960

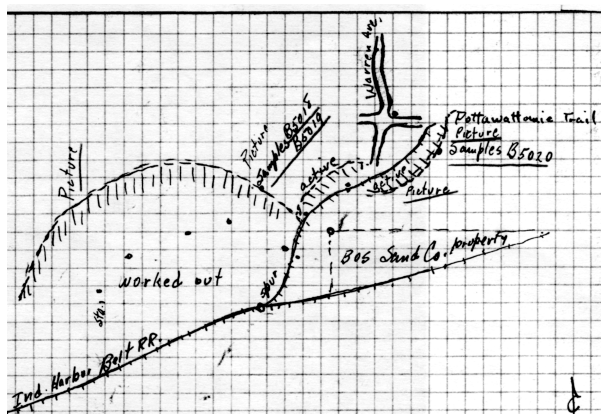


USGS Gary, 1991

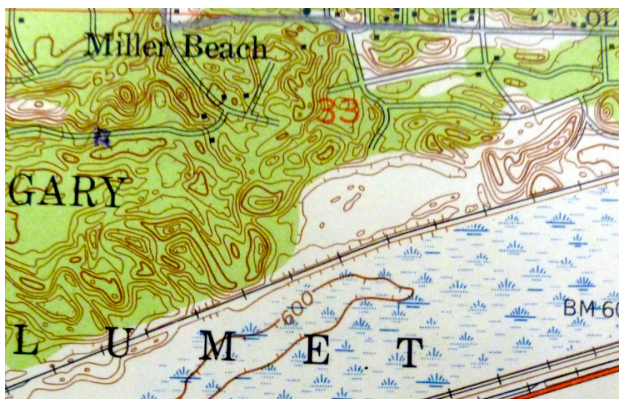
USGS Portage, 1992

Nobel School Area (Section 33)

In the 1940s and '50s Aetna Superior and Bos Sand Companies both mined this area north of of the Indiana Harbor Belt Railroad (IHB). The Railroad built a spur into the property in 1949. In 1950, eight cars a day were being filled with sand, which was being sent to foundries.³ The Marquette Trail today follows the abandoned Indiana Harbor Railroad route through this area.



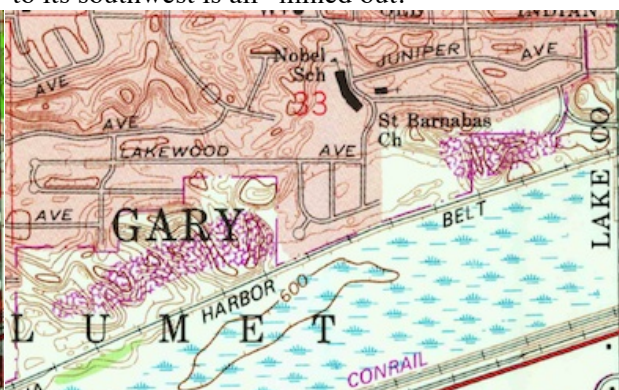
1950: Bieber's sketch of the Aetna Superior Sand pit. The IHB spur is not shown on any of the maps.



1953: Mining by Aetna Superior Sand in the area at the south end of Warren Street. Large bare area to its southwest is all "mined out."



1960: Housing on Lakewood and Nobel School have been built on land excavated since 1953.



1968 / Photo revision (in Purple) in 1980 ASSC land is residential. Areas east and west of that land are being mined by Bos Sand Company.



1992: Mining is completed. Some areas west of ASSC land is still wooded (green).



Green shaded area is within the National Lakeshore, 2014. The dashed line is the Marquette Trail.

³ Bieber, Field notes, June 22, 1950.

Southeast Miller—Routes 12 & 20 Corridor (Sections 5 and 4)

Sections 5 and 4, east of the original town of Miller were likely the first areas in Lake County to be heavily sand mined. Unfortunately no topographic maps were made of the area before 1900, and none of the area east of (roughly today's) Montgomery Street until 1935. The 1900 Tolleston map was published before either Routes 12 or 20 were built. The 1934 map and all the subsequent ones show those two highways.

The 1900 map (below on the left side) shows several 20- and 30-foot dunes between Long Lake and the Wabash RR to the south.

All were removed, in full or in part, by 1959. Most were replaced with depressions.

The 1934 map (right) faintly shows the B&O spur that was used for mining both here and on



USGS Tolleston, 1900*

USGS Porter, 1934

Inland Steel Company lands in western Porter County.

This 1938 aerial photograph (which unfortunately includes only the area seen on the 1934 Porter quadrangle map above it) vividly shows the large area then being mined on the southeast quarter of Section 4. After passing this area, the spur turned east into Porter County where it supported mining there on Inland Steel Company's property.

There has been much more mining here along Highway 20 than on 12. As can be seen on the land-ownership maps on page 2, the early companies that owned their own pits were in the southern half of Sections 5 and 4, where Rt. 20 is now.



Aerial photograph taken November 9, 1938

[Indiana Dunes National Lakeshore]

***Notes:** On all topographic maps, Section 5 in Miller is split. The west portion appears on the *Tolleston* and *Gary* maps. The east portion on the *Porter* and *Portage* maps.

These two maps are the oldest Tolleston and Porter topographic maps. Surprisingly, they were published 34 years apart from each other.

The Bieber and Smith map (right and copied from page 29) shows how much of the available sand in these two sections of Southeast Miller was mined-out by 1950.



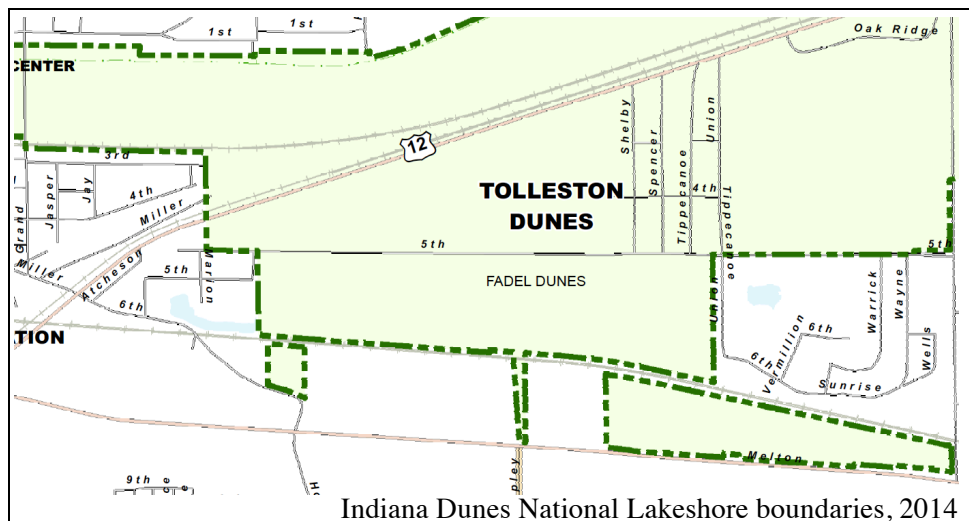
Bieber and Smith, 1952 showing mined out parcels

This 1992 map shows the lack of the tall dunes shown on the 1900 map on the previous page. A trailer park has replaced most of the dune in the SW¼ of section 5; a pond sits north of Old Hobart Road where another dune once sat. A residential area including



Woodlake Village Apartments was built on the mined area west of the county line. The area around the intersection of Rts. 51 and 20 including the old Dunes Shopping Center northeast of that intersection has been leveled. The Fadell family mined the area to the east of that in the 1980s. That parcel, partly mined below the level of U.S. Rt. 20, is at the western boundary of that portion of the National Lakeshore.

The Tolleston Dunes in Lake County were added to the National Lakeshore as part of Congress' expansion bill in 1976.



American Sand and Gravel Company

The American Sand and Gravel Company, chartered in 1910, operated in both Sections 5 and 4 in eastern Miller from at least 1913, when it was involved in a law suit,⁴ through at least 1926⁵ when the land ownership map on the second page of this chapter was published. The horse at the right of this photo indicates that the photo was probably taken at the early end of this time period.

American Sand and Gravel Company had a close business relationship with the Garden City Sand Company with the president of this company also the secretary-treasurer of the Garden City Company. Garden City owned land in Section 5 immediately to the south of American's.



The American Sand and Gravel Company sand pit in Miller. A rather large-scale operation with three parallel tracks, a steam shovel, and a horse. Circa 1910-13. [Courtesy of Sandra Nicholson Layton]

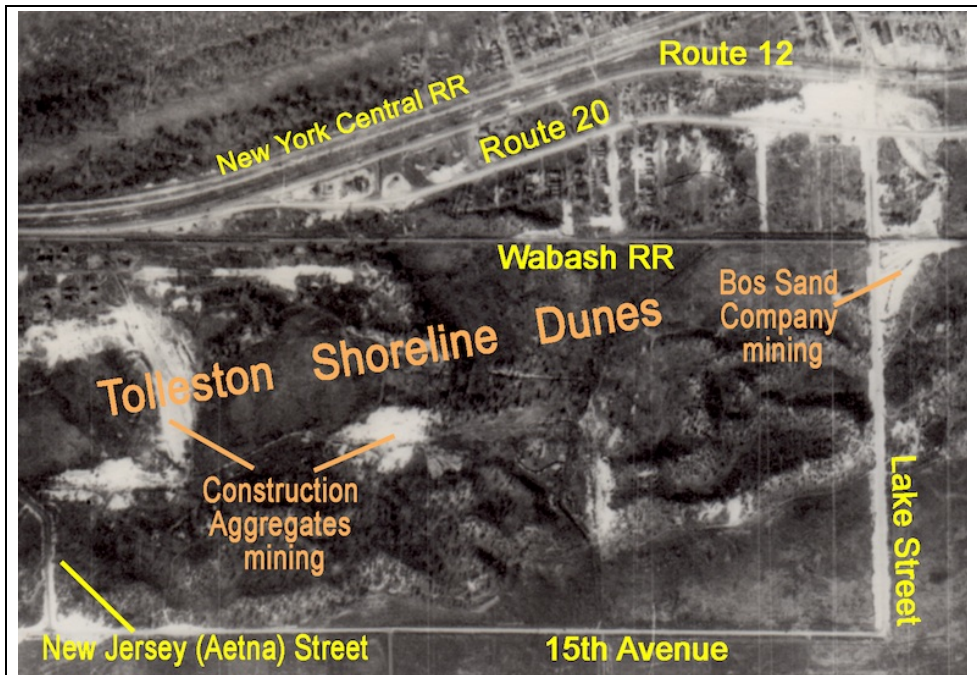
⁴ Zoercher, 1915, p. 525.

⁵ Thrift Press [map], 1926.

Aetna Area (Sections 12 and 7)

Aetna, from 1881 to about 1920, was the home of the Aetna Powder Plant. It was incorporated as an independent town in 1907. The location amongst its several sand dunes was advantageous for the plant and its employees as the dunes were used to separate many of the buildings so that if any buildings exploded (and they occasionally did), others might be protected. However, after several devastating explosions and employee deaths, the factory closed after World War I. The little ½-square mile town was annexed by Gary in 1924.

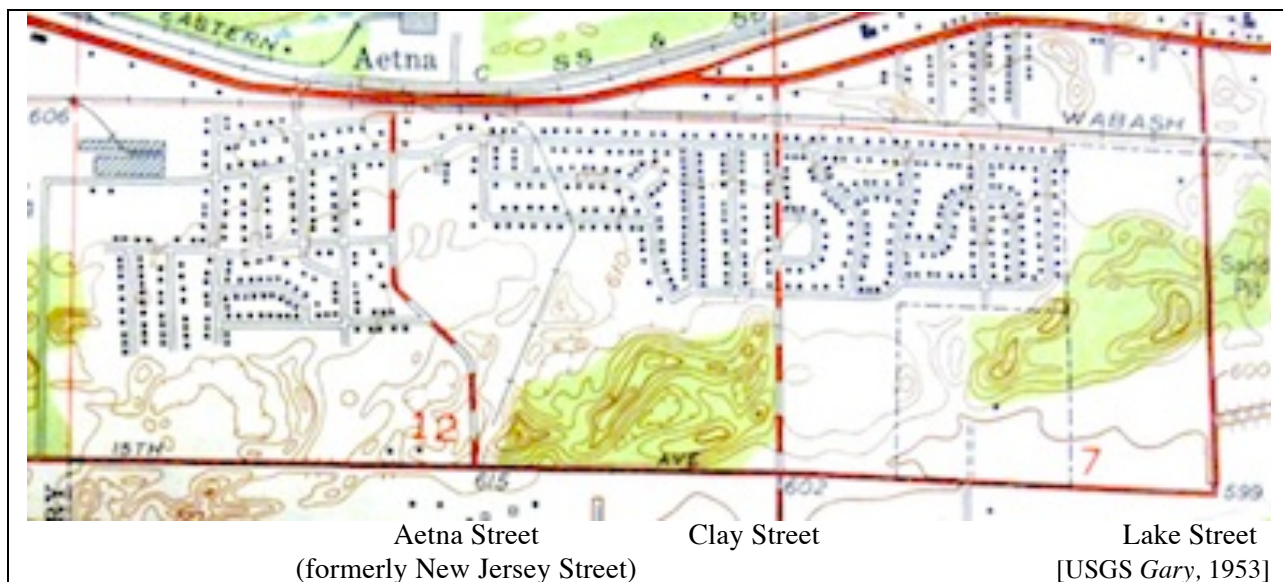
Extensive mining began well before this aerial photograph was taken in 1938. In the 1940s and into the '60s Construction Aggregates Corporation mined the area south of Aetna in Section 12, while Bos Sand Company mined the area east of the residential area in Section 7. The sand deposits here are of Tolleston age.



Aetna / Southwest Miller, November 2, 1938.

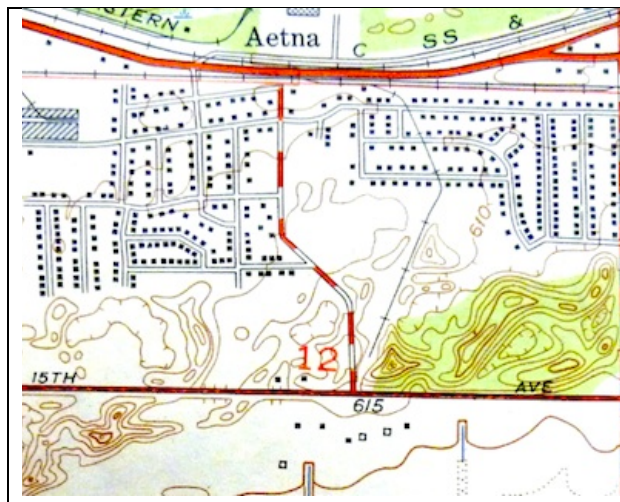
[Indiana Dunes National Lakeshore collection]

Aetna in 1952.



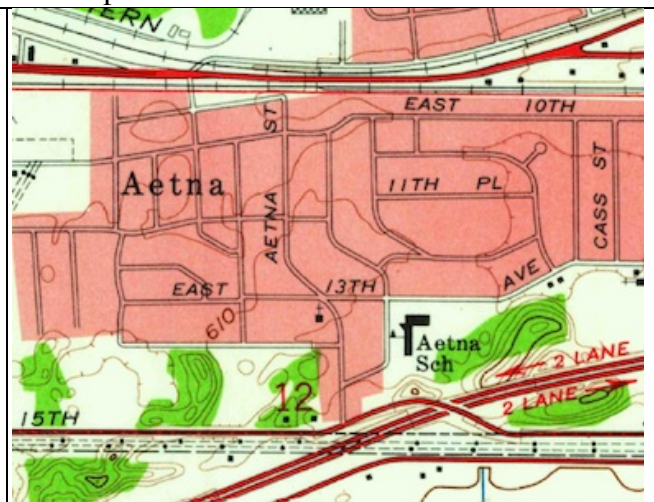
Aetna South (N½ Section 12)

The sand mined area was on both sides of the southern part of Aetna Street.



Note the rail spur.

[USGS Gary, 1953]



[USGS Gary, 1959]

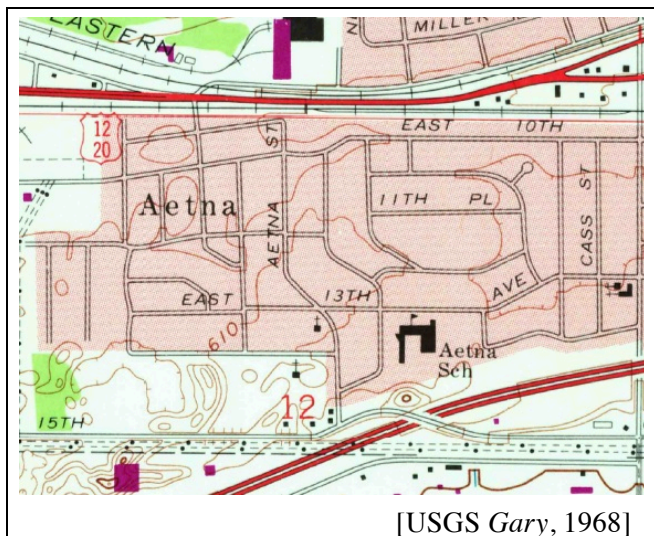
Construction Aggregates Corporation mined the area that became part of the southern part of the Aetna neighborhood. The mining area was serviced in the early '50s by a long rail spur from the Wabash Railroad. According to geologists Smith and Patton (1952) the shortness of the dune ridge here necessitated the use of two parallel tracks for the rail cars. Production then was four cars a day.⁶ The company also had a sand sucker boat operating in Lake Michigan waters.⁷

The Indiana Toll Road was completed in 1956. By 1959 new streets were added to the neighborhood.

Mining was occurring past 1959 as one can see that the two dunes east of Aetna School on either side of the Toll Road were present in 1959 but not in 1968.

Red Top trucking got a permit in 1963 from the City of Gary to finish that work.⁸ When the northern dune was gone, 13th Place was added to the subdivision. It had houses by the time the 1968 map was created.

The sand found in this area was finer grained than sand found further east. That texture of sand was preferred by the Crane Company and other valve manufacturers, who purchased large amounts of it. Some sand from this pit also was



[USGS Gary, 1968]

⁶ Bieber's field notes, p. 52, August 1, 1950.

⁷ S., J. *Outdoor Indiana*, October 1948, p. 14-15.

⁸ *Gary Post-Tribune*, September 24, 1963.

mixed with bituminous material and used as a top dressing on local roads.⁹ The dune due south of Aetna School and next to the 15th Avenue bridge over the toll road still stands.

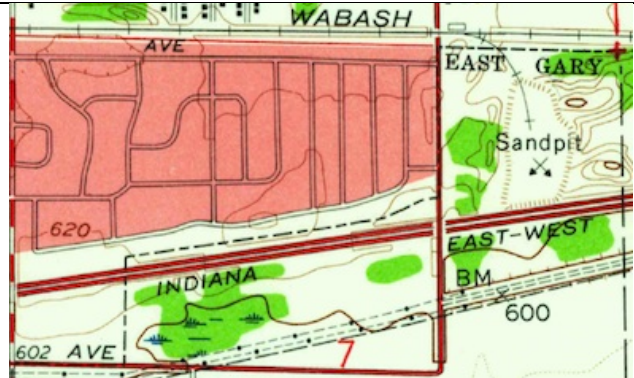
⁹ Smith and Patton, 1952. p. 6.

Aetna East (Section 7)

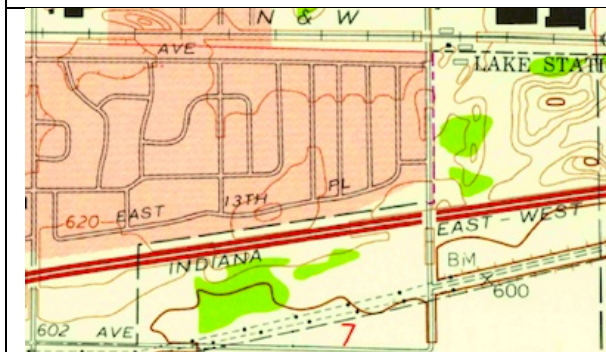
The Bos Sand Company mined the area to the east of Lake Street east of Aetna and immediately west of the area Knickerbocker mined in the 1920s. This pit was also serviced by spurs from the Wabash Railroad. Mining appears to have been completed here by 1968.



Aetna: East [USGS Gary, 1953]
Bos Sand Company is mining east of Lake Street. West of Lake Street is has woodland.



Aetna: East [USGS Gary, 1959]
Toll Road built. Dunes west of Lake Street are gone and replaced by a residential neighborhood. The sand pit east of Lake Street has a lower elevation.

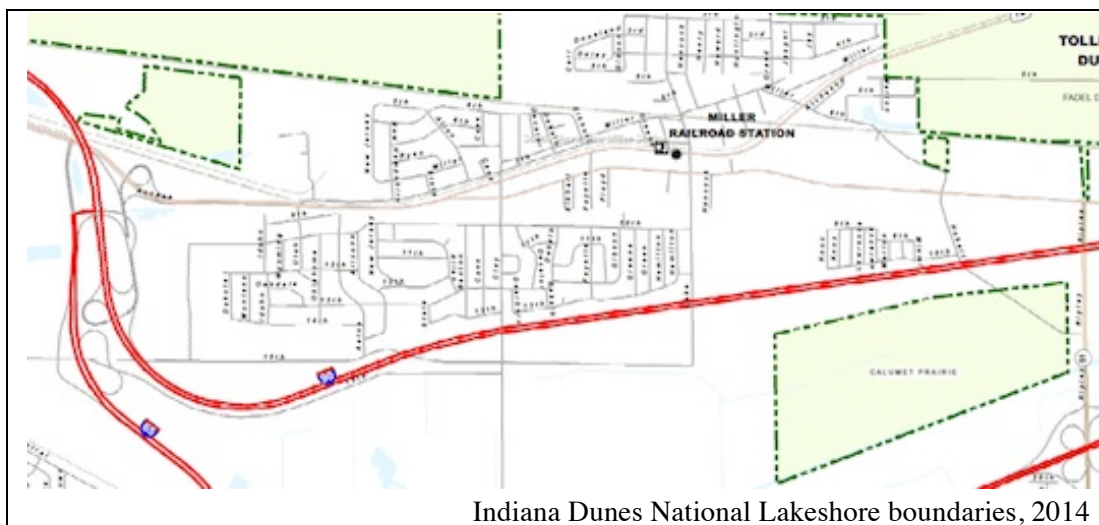


Aetna: East [USGS Gary, 1968]
Sand pit apparently closed.



A Bos Company crane. Circa 1920s.
[Courtesy of Sandra Nicholson Layton]

National Lakeshore properties near Aetna.



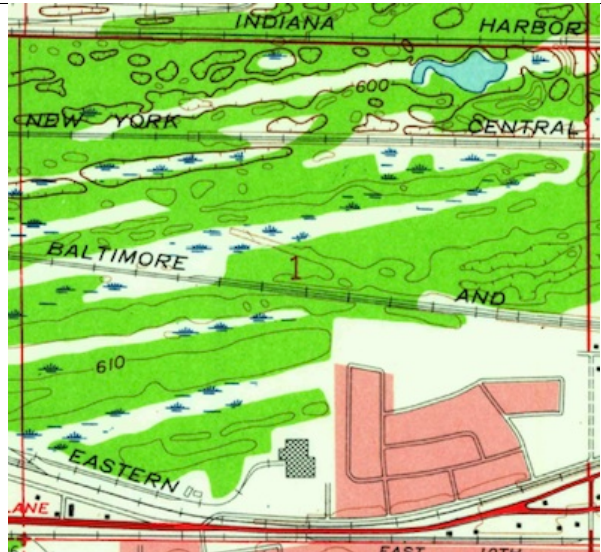
Dune and Swale Topography (Section 1 and west)

There is little land in the industrial, commercial, and residential areas of northern Lake County that has not been altered. Alterations in the 19th century were primarily along the rail lines which had to be as level as possible. Development then centered around railroad stations.

Before the early 20th century, when U. S. Steel was established in Gary, much of this land in north central Gary had a dune (ridge) and swale topography. This type of landscape was composed of up to 125 parallel low sand ridges separated by low and linear wetlands. Vestiges of this type of landscape still exist at Gibson Woods Nature Preserve in Hammond, some areas near the Gary Airport, and at Miller Woods within the National Lakeshore.

This portion of southwest Miller (Section 1) was nearly all dune and swale until about 1950 when the parcel in the southeast quarter, north of Routes 12 and 20 and the South Shore Railroad was leveled for a new housing development (in pink). That, plus the clear, white area, show where the trees, sand ridges, and wetlands have all been “wiped off the map.”

By 1968, the residential area had been extended north to the B&O tracks and east to the Section line.



[USGS Gary, 1959]

United States Steel Property West of Miller Woods

This undulating dune and swale landscape was unsuitable for either heavy industry or typical urban development. Thus in the years 1906 to 1909, much of this landscape in the northern parts of Gary, including many residential neighbor-



Leveling the land for Gary Works

[U. S. Steel Collection, CRA]

hoods (but excluding Miller, which was not part of Gary at that time) was leveled. The ridges were scraped and the wetlands filled in.



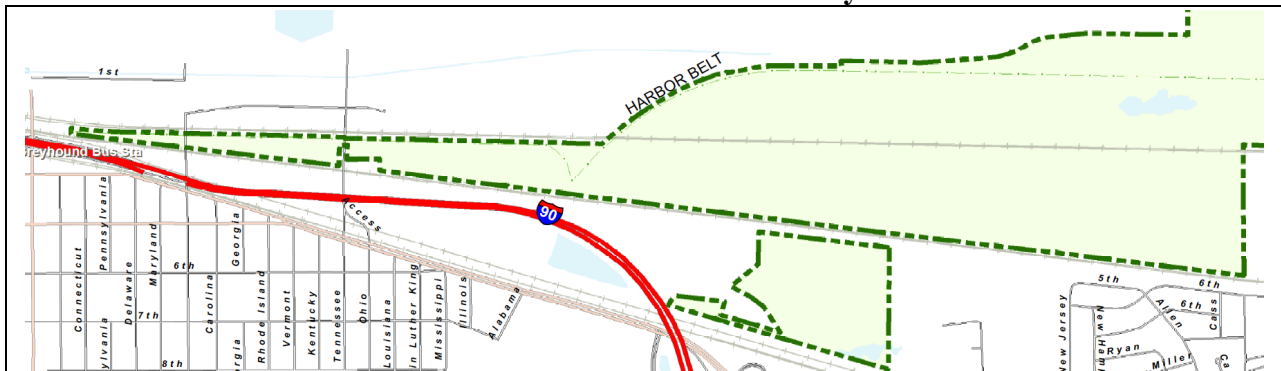
Dredging a new channel for the Grand Calumet River.
[U. S. Steel Collection, Calumet Regional Archives]

Besides flattening the landscape to allow the construction of its mills, U.S. Steel also moved the Grand Calumet River itself by dredging a new channel for it about one-half mile south of the original channel.

In areas where lawns were to grow, Gary imported black dirt from Munster and other nearby locations. The American Brick Company in Munster had removed the top soil from an area south of the Pennsylvania Railroad in order to excavate clay for its new brick works. The brick company wanted to get rid of the black dirt. Gary needed it for landscaping.

Many of the areas owned by railroads or U.S. Steel that were not built on have kept their original dune and swale topography.

Between the Rail Lines: Downtown Gary to Miller



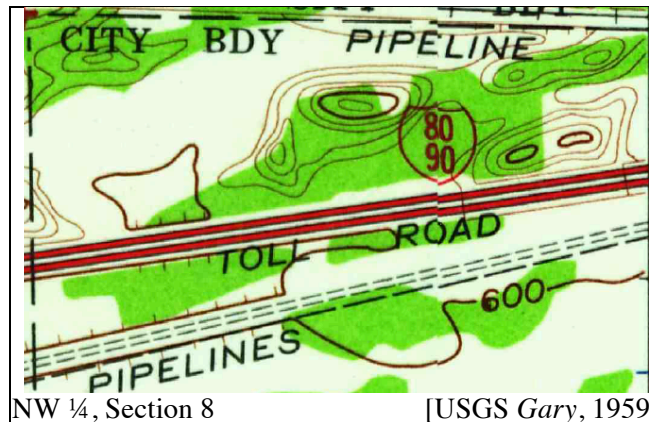
Outline of the western end of the National Lakeshore boundaries.



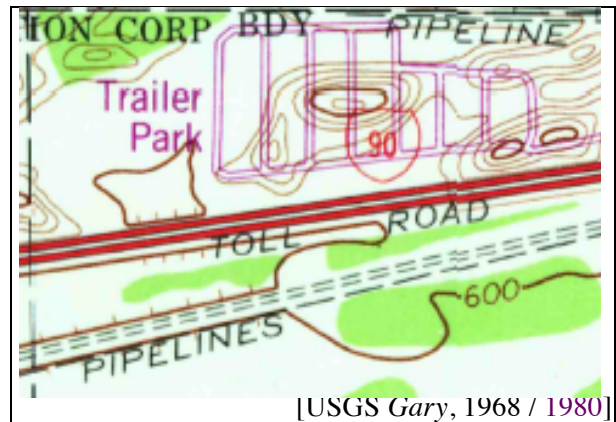
As can be seen in the above 1991 topographic map, much of the landscape “between the rails” and within the National Park boundaries is composed of parallel, linear ridges and wetlands. Much of the land between the two rail lines that nearly meet at the west end of these maps was owned by the Michigan Southern (later New York Central) Railroad and never developed.

East Gary / Lake Station (Section 8)

As can be seen on the land ownership map shown at the beginning of this chapter, the northwest quarter of Section 8 was purchased about or before the turn of the last century by the E. A. Shedd Company, later Knickerbocker Ice Company. In 1950 Indiana geologists Bieber and Smith noted that a diagonal swath of that section was “mined out”—shown as white near the upper left corner of the two topographic maps shown here, leaving the 40 and 50-foot high dunes in the center. Those dunes were then excavated before the trailer park was built at some time between 1968 and 1980.



[USGS Gary, 1959]



[USGS Gary, 1968 / 1980]

This mid-scale mining has apparently escaped the eagle eyes of USGS mapmakers. The contour lines on the maps above were drawn in 1953 when the dunes were still there but the Mansard Du Lac trailer park had not yet been built. The contour lines appeared unchanged on an updated 1968 map. The dunes were certainly excavated before the trailer park was established in the 1970s, its roadways added to the map in purple when the map was revised for the 1980 publication. The contour lines, representing the no-longer extant dunes were still shown on the 1991 USGS map and, surprisingly, are still shown on the newest USGS map published in 2013.

Gravel

In 1907, W. S. Blatchley, the Indiana state geologist, reported that there were some small gravel deposits in the southern part of the county but none in the dune country. Of the 700 miles of roads in the county at that time, only 71 miles had been improved with gravel and 81 miles with crushed stone—all of which had been imported from Illinois.¹⁰

¹⁰ Blatchley, 1907, p. 183-184.